## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

10-094959

(43) Date of publication of application: 14.04.1998

(51)Int.CI.

B24B 37/04 B24B 37/00

(21)Application number: 09-086970

(22)Date of filing:

04.04.1997

(71)Applicant: TOKYO SEIMITSU CO LTD

(72)Inventor: INABA TAKAO

SAKAI KENJI

OGURI MASAAKI

**NUMAMOTO MINORU** 

TERASHITA HISASHI

(30)Priority

Priority number: 08200620

Priority date: 30.07.1996

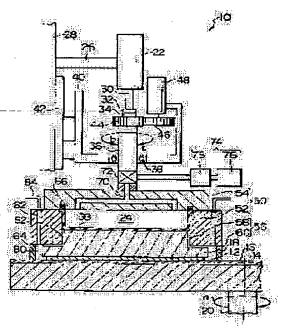
Priority country: JP

## (54) POLISHING DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide the polishing device of a semi-conductor wafer which can apply a polishing pressure and supply a polishing liquid to the entire surface of the semi-conductor wafer uniformly and also carrying out a polishing work and the dressing work of a polishing cloth simultaneously.

SOLUTION: A wafer holding disc 56 for holding a semiconductor wafer 12 is loosely inserted to a support frame body 50 and an air room 24 is formed therebetween. A retainer ring 18 for encircling around the semi-conductor wafer 12 and contacting to the semi-conductor wafer 12 as well as the grinding cloth 16 is installed on the support frame body 50. A polishing liquid adjust groove and an uneven part for dressing the polishing cloth 16 are formed on the bottom surface of the retainer ring 18. The polishing liquid is supplied to the inside of the retainer ring 18. A polishing pressure and the relative position between the semi-conductor wafer 12 and the retainer ring 18 are controlled by



moving the support frame body 50 vertically by an elevating device 22 and controlling the inner pressure of the air room 24 by a pressure adjust device 74.

## **LEGAL STATUS**

[Date of request for examination]

18.05.1998

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than

BEST AVAILABLE COPY

the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3106418

[Date of registration]

08.09.2000

[Number of appeal against examiner's decision

of rejection]

[Date of requesting appeal against examiner's

decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office